

Appl. No. 09/940,378
Amdt. dated May 13, 2005
Reply to Office Action of January 13, 2005

REMARKS

Applicants have received and carefully reviewed the Office Action mailed January 13, 2005. Claims 105, 107-112, and 116-123 remain pending. Reconsideration and reexamination are respectfully requested.

In paragraph 2 of the Office Action, claims 105, 108 and 116-118 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,243,978 to Duffin, Jr. On closer review, it is believed that this rejection was also intended to apply to claims 121 and 122. Therefore, Applicants will address the rejection as applying to claims 121 and 122.

Duffin, Jr., shows the use of "wide area" pacing using large area epicardial electrodes. As denoted by the term "epicardial," the patch electrodes are disposed on the heart. The purpose of the large area electrodes appears to be to cause simultaneous depolarization across a large area/volume of heart tissue when a pacing pulse is applied.

Claim 105 recites:

105. A method of treating an abnormal cardiac rhythm comprising pacing the patient's heartbeat by:

providing a pair of electrodes disposed internal to a patient and exclusive of the patient's heart;

sensing an event in the patient's cardiac rhythm;
transferring energy from an energy source to an energy storage system;
discharging energy from the energy storage system using the electrode pair; and

determining whether the patient has an abnormally slow heartbeat,
wherein the step of sensing an event in the patient's cardiac rhythm provides information for determining whether the patient has an abnormally slow heartbeat.

The Examiner states that "Exclusive to the patient's heart has been interpreted as not entering the heart." Applicants respectfully disagree with this interpretation of the claim language.

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Applicants do not believe that the definition of "exclusive of" relied upon by the Examiner is correct. Specifically, an electrode disposed "exclusive of the patient's heart" would be an electrode disposed internal to a patient but at a location not including the patient's heart. This would exclude electrodes disposed on or inside of the patient's heart, and does not include an epicardial electrode as taught by Duffin, Jr. It appears that Duffin, Jr., only suggests the use of epicardial and/or intracardial electrodes, and so at least one element of claim 105 is not disclosed. Therefore, claims 105, 108 and 116 are believed to be patentable over Duffin, Jr.

Claim 117 recites in relevant part, "providing a pair of stimulus electrodes exclusive of the patient's heart." Claim 121 recites in relevant part "providing electrical pacing stimulus between two implanted electrodes disposed exclusive of the heart." Like comments apply to these claims and their dependent claims. Therefore, claims 117-118 and 121-122 are also believed to be patentable over Duffin, Jr.

In paragraph 5 of the Office Action, claim 110 was rejected under 35 U.S.C. §103(a) as being unpatentable over Duffin, Jr., in view of U.S. Patent No. 5,292,338 to Bardy. In light of the above comments, it is noted that at least the term "exclusive of" differentiates claims 105 and 108 (the parent claims of claim 110) from Duffin, Jr. The '338 patent to Bardy appears to suggest intracardiac electrodes, as shown, for example, in Figure 1. As such, it does not appear that the suggested combination overcomes the above remarks with respect to the definition of "exclusive of". Therefore, claim 110 is believed patentable over the cited combination.

In paragraph 6 of the Office Action, claim 119 was rejected under 35 U.S.C. §103(a) as being unpatentable over Duffin, Jr., in view of U.S. Patent No. 5,331,966 to Bennett et al. Claim 119 depends from claims 118 and, in turn, 117, and is subject to similar analysis as noted above. In particular, claim 117 recites in relevant part, "providing a pair of stimulus electrodes exclusive

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of the patient's heart." As the Examiner notes, Bennett et al. appear to suggest sensing electrodes placed on the canister of the device, however, it does not appear that the noted claim language is met. Particularly, Bennett et al. show pacing electrodes in the heart (elements 14, 16 in Figure 1; elements 103, 105 in Figure 6). The Examiner has not noted any suggestion in Bennett et al. to overcome the recited "exclusive of" language. Therefore, claim 119 is also believed to be patentable over the cited combination.

The rejections stated in paragraphs 3 and 7 are rendered moot by the cancellation of claims 106 and 113-115.

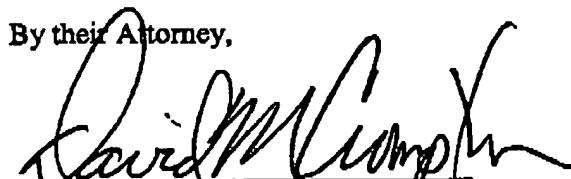
Applicants would like to thank the Examiner for noting the allowability of the subject matter encompassed by claims 107, 108, 111, 112, 120 and 123. It is believed that the objections to these claims are overcome with the above amendments.

Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

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By their Attorney,



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